**Grade 6 – Review for Final Exam**

**Chapter 1 – The Nature of Science –pp. 7-35**

* Identify the three main branches of science
* Explain the steps taken in scientific methods.
* Distinguish between observations and inferences.
* Compare and contrast scientific variables and constants
* Explain how a control is used during an experiment
* Read and study the ***Summary*** items on pages 11, 20, 26 and 30
* Read and study the ***Reviewing Main Ideas*** section on page 35.

**Chapter 12 - The Atmosphere in Motion** – ***Sections 1- 3***  - pp. 342 – 367

Vocabulary words: pp. 348 and 356.

* Explain why air has pressure
* Describe the composition of the atmosphere
* Describe the Water Cycle and how heat energy impacts it.
* Compare ways that heat is transferred on Earth.
* Describe the formation of different kinds of clouds and precipitation
  + Types of clouds
  + Classification of clouds such as low or high clouds
  + Distinguish between rain, snow, sleet, hail and relate how temperature impacts this difference.
* Explain what causes wind.
  + Which winds are found near the equator?
  + Which winds are over our area?
  + What is the Jet Stream?
  + Identify high and low pressure centers. In which direction does the wind spirals.
* Explain the ways that air masses and fronts form.
  + Describe the various types of fronts and the air masses involved with them.
  + Include: cold front, warm front, stationary front, occluded front
* Discuss the causes of severe weather like hurricanes and tornadoes.
* Read the ***Summary*** on pages 355 and 362
* Also read the ***Reviewing Main Ideas***  - (Sections 1 - 3) on page 367.

**Climate Handout**

1. Describe what determines climate
2. Explain how latitude, oceans, and other factors affect the climate of a region.
3. Describe a climate classification system
4. Explain how organisms adapt to particular climates.
5. Read the ***Summary*** on pages 151 and 155 of your handout.
6. Additional facts:

* An area’s climate is the average weather over a long period of time, such as 30 years.
* The three main climate zones are tropical, polar, and temperate.
* Features such as oceans, mountains, and even large cities affect climate.
* Climates can be classified by various characteristics, such as temperature, precipitation, and vegetation. World climates commonly are separated into six major groups.
* Organisms have structural and behavioral adaptations that help them survive in particular climates. Many organisms can survive only in the climate they are adapted to.
* Adaptations develop in a population over a long period of time.

**Chapter 3 – Matter and its Changes** - pp. 70-91

* Identify ***physical properties*** of matter
* Describe the states of matter
  + Determine how temperature changes affect substances (freezing/melting, boiling, sublimation, etc.)
* Explain density
* Identify ***chemical properties*** of matter
* Distinguish between a ***physical*** and a ***chemical*** change.
* Read and study the ***Summary*** items on pages 79
* Read and study the ***Reviewing Main Ideas*** regarding section 1 on page 91

**FINALLY**

KNOW ALL OF THE VOCABULARY WORDS ASSOCIATED WITH THESE CHAPTERS AND HANDOUT.